

***CECILIOIDES ACICULA* (MULLER, 1774) (PULMONATA:
FERRUSSACIIDAE), A BURROWING LAND SNAIL INTRODUCED TO
TASMANIA**

Kevin Bonham^{1,2}

¹Honorary research associate, School of Geography and Environmental Studies, University of Tasmania; ²410 Macquarie Street, South Hobart Tas 7004. Email: k_bonham@tassie.net.au.

ABSTRACT

This paper gives the first definite Australian record for the blind awlslug *Cecilioides acicula* (Muller, 1774), the first ferrussaciid recorded from Tasmania.

IDENTIFICATION

Cecilioides acicula has a small, very thin needle-shaped shell of 5.5-6 whorls, 4-5 mm high and 1-1.3 mm wide. The shell is glossy, pale yellow to off-white, with a sculpture of irregular low radial corrugations. The body whorl accounts for around half the shell height and the aperture is elongate, around 1.5 mm high by 0.5 mm wide. *Cecilioides acicula* cannot easily be mistaken for any other Tasmanian land snail, native or introduced. There is some resemblance in size and shape to the truncatellids present in saltmarshes in the north of the state but these have much less pointy spires, more rounded apertures and are operculate. The species is known by a variety of common names including blind snail, European blind snail, blind awlslug, blind pin snail and blind white snail.

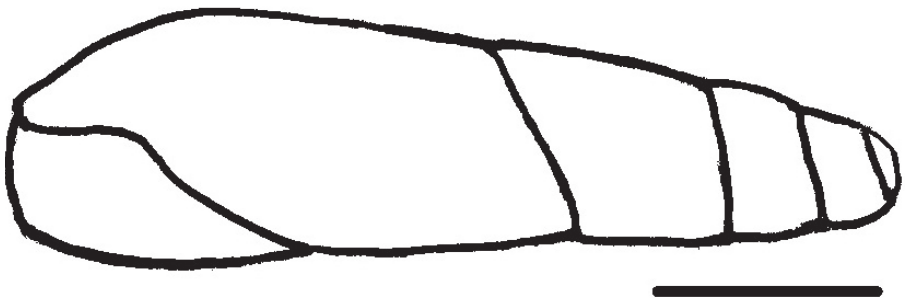


Figure 1. *Cecilioides acicula*. Horizontal line represents 1 mm. Line drawing by the author.

CECILIOIDES ACICULA IN TASMANIA

The house where I live, at 410 Macquarie Street, South Hobart, was built in the 1850s and has an excavated backyard courtyard bounded by a rock wall approximately 1.4 metres high and constructed of loose boulders with gaps between them. Behind the rock wall is a bank of deep soil covered by lawn. Seepage from this earthen bank into the rock wall, sometimes causing parts of the wall to collapse, occurs in times of heavy rain or as a result of hosing. The soil is calcium-rich and includes mammal bones from nineteenth-century farms.

On 15 Feb 2003 I collected a single dead specimen of *C. acicula* from a ledge on the rock wall approximately 60 cm below the soil surface. On 30 June 2003, I collected a second dead specimen in debris washed out from behind the wall following a partial collapse, and on 26 Oct 2003 I collected a broken shell from mud in a gap in the rock wall approximately 40 cm below the soil surface. No further specimens have yet been seen (perhaps because more of the wall is now covered in vegetation, or because water flow through the yard from the adjacent Adult Education Centre car park has been greatly reduced) and limited attempts to find the snail in similar environments elsewhere in Hobart have failed. All three specimens collected are worn and were presumably dead for some time prior to collection, so the finds do not guarantee an extant population, although there is no particular reason to doubt that one exists.

DISCUSSION

This species, widespread as a native in Europe, is a burrowing snail that lives underground typically 40-70 cm below the soil surface. Dead shells are most commonly exposed in ant or mammal diggings or in soil washed away in small floods (Grego, pers. comm). The species may have been present in Hobart for a long time. Its discovery was serendipitous and the population could easily have gone undetected for much longer.

Ceciloides acicula has been recorded from New Zealand (Barker, 1999). There is no previous known confirmed record from Australian territory. Varman (1998) illustrates a snail that looks identical to *C. acicula* from Norfolk Island but writes: "Another mystery but these have been found in archaeological contexts dating from the 1790s but also in fossiliferous deposits, so has to be indigenous." As noted by Evans (1972), *C. acicula* is very capable of burrowing into fossil deposits; therefore the Norfolk Island specimens are not necessarily native and could well be this species.

Because *C. acicula* is subterranean and hence easily overlooked, it is likely

to be some time before sufficient records are available to give a useful picture of how widespread and common it is (or has been) in the Hobart area, or to comment on any environmental impact it might have. I would appreciate any further records or suspected records of the species. In particular, archaeologists excavating historic sites, including grave sites, may encounter this snail.

This is the second species from this family to be recorded from Australia. The other species, *Ferrussacia folliculus* (Ferussac, 1819), has been recorded from suburban gardens in Adelaide, South Australia (Venmans, 1957).

ACKNOWLEDGEMENTS

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